

WHAT THE INVENTION CLAIMED IS

1. An access and data management method using parallel tracks comprising a plurality of flash memory cells, a plurality of independent USB ports for transferring sets of data from and within said flash memory cells, wherein when a target set of data is a plurality of sectors, then a controller uses a plurality of pages as a single unit to process reading and writing so that a plurality of pages can be read and written into said flash memory cells simultaneously at each time.
2. The access and data management method according to claim 1, wherein further combining with an interleaving method including two or more flash memory cells.
- 10 3. The access method according to claim 2, wherein said interleaving method allows reading/writing a second set of data into the flash memory cells independent of reading/writing of a first set of data into the flash memory cells through the plurality of USB ports and therefore reduces a waiting time for reading/writing, and said flash memory cells can transport data through said plurality of independent data USB.
- 15 4. The access and data management method according to claim 2, wherein further combining with a mother and child concept for processing sets of data, so that the controller need not repeat transferring or erasing actions into said flash memory cells while writing said sets of data, and therefore the life of said flash memory cell can be extended, and also an operating speed of writing into said flash memory cell can be increased.
- 20 5. The access and data management method according to claim 2, wherein further combining with a copy back command to put data into a buffer temporarily for reducing

the chances of waiting and thereby further reducing the time for transferring the sets of data.

6. The access and data management method according to claim 1, wherein the method of using the parallel tracks of flash memory cells can be suitably applied in any host, wherein the host comprising a portable ROM, a card reader in USB1.1 series or a portable ROM, a card reader in USB2.0 series or an IDE/PCMCIA interface.
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